

IN THE SPECIFICATION:

Please amend the paragraph at page 14, line 4 as follows:

*A2  
cancel.*

As described above, the user profile may be accumulated in three blocks 1 to 3 identified as 201 to 203 in Fig. 2. In this case, the oldest user file may be discarded every two months, and the user profile may be updated. The manner in which a user profile may be updated under control of the controller 101 will be described with reference to a flowchart of FIG. 9. The flowchart of FIG. 9 may be executed at every constant time. Incidentally, although not shown, the controller 101 may include a clock circuit (not shown) for obtaining date and time information.

Please amend the paragraph at page 14, line 22, as follows:

*A3  
cancel.*

The virtual channel may be created by effectively utilizing the user profile thus created. This virtual channel may be created when a user may instruct the creation of the virtual channel by operating the key input section 102. Flowcharts of FIGS. ~~10 to 13~~ 10A to 10D show the manner in which the virtual channel is created under control of the controller 101. Although not described, the user can set the number of channels of the virtual channel by operating the key input section 102.

Please amend the paragraph at page 15, line 6, as follows:

*A4  
cont'd*

Initially, at a step ST21 of FIG. ~~10~~ 10A, when the user may set a time range of creating a virtual channel by operating the key input section 102, then control

*A4  
cancel.*

goes to a step ST22, whereat user profile information of at every unit time within the set time range may be read out from the blocks 1 to 3. Then, at steps ST23 to ST25, category lists, title lists and key word lists of the respective blocks 1 to 3 may be synthesized at every unit time, thereby resulting in synthesized user profile information being created. In this case, when the same items may be synthesized, an added value, a maximum value and a weighted mean value, for example, may be used as a synthesized value of a preference degree. When the weighted mean value may be used, a weighting coefficient may increase on the current block side, for example. FIG. 44 11 shows an example of the manner in which synthesized user profile information may be created. In this example, an added value may be used as the synthesized value of the preference degree.

Please amend the paragraph at page 15, line 21, as follows:

*A5  
cancel.*

Next, at a step ST26, it may be determined whether or not the priority viewing list may contain programs which fall within the set time range. Although not shown, the priority viewing list may be created in advance by setting the priority program when a user may operate the key input section 102. If the priority viewing list contains the programs which may fall within the set time range, then at a step ST27, such program may be located at a virtual channel V-ch1. Control goes to a step ST28 (FIG. 44 10B). If on the other hand the priority viewing list may not contain the programs which may fall within the set time range, then control immediately goes to a step ST28. At the step ST28, M, N may be set to 1, respectively.

Please amend the paragraph at page 18, line 4, as follows:

*A6  
concl.*

~~If on the other hand the channel changing number may not be greater~~  
than the half of the total virtual channel number, then at a step ST36 ST40, whereat there  
may be changed the virtual channel in which the program selected may be located.  
Specifically, it may be determined at a step ST41 whether or not  $M = M_{\max}$  may be  
satisfied.  $M_{\max}$  may represent the number of virtual channels that may be created. If  $M =$   
 $M_{\max}$  may be satisfied, then at a step ST42,  $M = 1$  may be satisfied, and then control  
goes back to the step ST39. If on the other hand  $M = M_{\max}$  may not be satisfied, then at  
a step ST43, whereat  $M$  may be incremented by one. Then, control goes back to the step  
ST39.

Please amend the paragraph at page 18, line 23, as follows:

*A7  
concl.*

~~If it may be determined at the step ST45 that the program may not be~~  
located at such virtual channel, then control goes to a step ST46. At the step ST46, it may  
be determined whether or not the programs selected according to the titles may be located  
at the virtual channels which may be greater than the half of the total virtual channels. If  
not, then control goes back to the step ST37, whereat the next title may be selected. If on  
the other hand the programs may be located, then control goes to a step ST51 (FIG. 12  
10C), whereat program may be selected based on the categories. If it may be determined  
at the above-mentioned step ST37 that the title list may not contain the remaining items,  
then control goes to the step ST51.

Please amend the paragraph at page 19, line 23, as follows:

*A8  
cancel.*

~~Also, if it may be determined at the step ST52 that there may exist~~  
programs which may agree with the extracted category, then at a step ST55, it may be determined whether or not the time of such program may overlap with that of the program that has already been located at the virtual channel VchM. If the time may overlap the time, then at a step ST56, it may be determined in order to avoid the overlapping of time whether or not the consecutive channel changing number may become greater than the half of the total virtual channels. If the channel changing number may become greater than the half of the total virtual channels, then at a step ~~ST52~~ ST56, it may give up to locate the program selected in the step ST52 at the virtual channel. Then, control goes to a step ST57.

Please amend the paragraph at page 20, line 19, as follows:

*A9  
cancel.*

~~If it may be determined at the step ST56 that the channel changing~~  
number may not become greater than the half of the total virtual channels, then at the step ~~ST52~~ ST56, there may be changed a virtual channel in which the selected program will be located. Specifically, at a step ST58, it may be determined whether or not  $M = M_{max}$  may be satisfied. If  $M = M_{max}$  may be satisfied, then at a step ST59,  $M = 1$  may be established, and then control goes back to the step ST55. If on the other hand  $M = M_{max}$  may not be satisfied, then at a step ST60, M may be incremented by 1, and control goes back to the step ST55.

Please amend the paragraph at page 21, line 5, as follows:

*A10  
cancel*

Also, if it may be determined at the step ST55 that the time may not overlap the time, then at a step ST61, that program may be located at the virtual channel V-chM, and then control goes to a step ST62. At the step ST62, it may be determined whether or not the program may be located at the N-th virtual channel of one hour of all virtual channels. If the program may be located at that virtual channel, then this mean that the creation of the N-th virtual channel of one hour was completed. Then, control goes back to the step ST31 (FIG. 41 10B), whereat the next virtual channel of one hour may be created.

Please amend the paragraph at page 21, line 14, as follows:

*A11  
cancel*

If it may be determined at the step ST62 that the program may not be located at that virtual channel, then control goes to a step ST63. It may be determined at the step ST63 whether or not programs selected according to the category may be located at the virtual channels which may be greater than the half of the total virtual channels. If not, then control goes to a step ST57, whereat the next program will be selected. If it may be determined that the program may be located at the virtual channel, control goes to a step ST71 (FIG. 43 10D), whereat programs will be selected based on the key word. If it may be determined at the above-mentioned step ST53 that the category list may not contain the remaining items, then control goes to the step ST71.

Please amend the paragraph at page 22, line 14, as follows:

*A12  
concl.*

~~Also, if there may exist a program which may agree with the key word~~  
thus extracted, then at a step ST75, it may be determined whether or not the time of that  
program may overlap with that of the program which had already been located the virtual  
channel V-chM. If the time may overlap the time, then at a step ST76, it may be  
determined in order to avoid the overlapping of time whether or not the consecutive  
channel changing number may become greater than the half of total virtual channel  
number. If the channel changing number may become greater than the half of the total  
virtual channel number, then at a step ~~ST72~~ ST76, it may give up to locate the selected  
program at the virtual channel. Then, control goes to a step ST77.

Please amend the paragraph at page 23, line 8, as follows:

*A13  
concl.*

~~If it may be determined at the step ST76 that the channel changing~~  
number may not become the half of the total virtual channel number, then at the step  
~~ST72~~ ST76, there may be changed a virtual channel in which the selected program may  
be located. Specifically, it may be determined at a step ST78 whether or not  $M = M_{max}$   
may be satisfied. If  $M = M_{max}$  may be satisfied, then at a step ST79,  $M = 1$  may be  
satisfied. Then, control goes back to the step ST75. If on the other hand  $M = M_{max}$  may  
not be satisfied, then control goes to a step ST80, whereat  $M$  may be incremented by 1.  
Control goes back to the step ST75.

Please amend the paragraph at page 24, line 15, as follows:

*A14  
cancel.*

FIG. ~~16~~ 13 shows an example of the manner in which virtual channels may be created. In this example, a time range may be set in a range of from 20 to 00 and in which six virtual channels V-ch1 to V-ch6 may be arranged by selectively locating programs of real channels of the channels CHa to CHh shown in FIG. ~~15~~ 12. Incidentally, "MOVIE 2" of the real channel CHg and "NEWS 4" of the real channel CHe are programs which were previously set on the priority viewing list, and these programs may be located at the virtual channel V-Ch1.

Please amend the paragraph at page 25, line 17, as follows:

*A15  
cancel.*

Also, control goes to the processing of the next one hour if there may not exist the synthesized user profile information of the corresponding unit time (see step ST30) in the virtual channel creating operation shown in FIGS. ~~10 to 13~~ 10A to 10D in the above-mentioned embodiment. The present invention is not limited thereto, and synthesized user profile information that may be ahead of and behind the unit time may be used if the synthesized user profile of the corresponding unit time may not be available.

Please amend the paragraph at page 26, line 2, as follows:

*A<sup>16</sup>  
cancel.*

Also, while the programs may be searched in the sequential order of the title, the category and the key word in the virtual channel creating operation shown in FIGS. ~~10 to 13~~ 10A to 10D in the above-mentioned embodiment, the sequential order may not be limited thereto, and may be arbitrarily set by a user operating the key input section 102, for example.